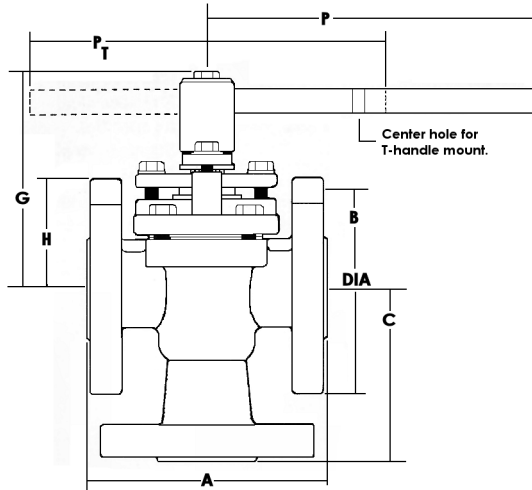




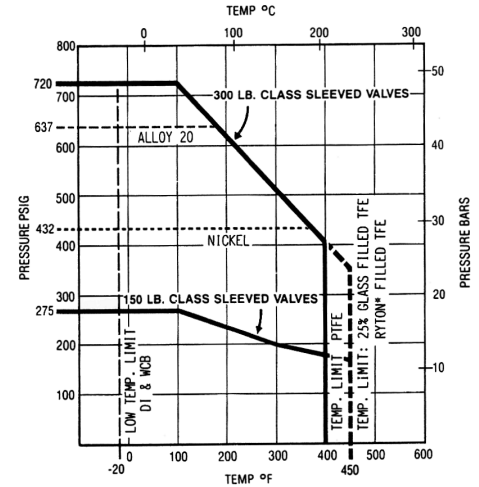
# 3-WAY SLEEVED PLUG VALVES

1/2" - 12"

## models V032 & V332



| PRESSURE-TEMPERATURE RATINGS |         |                                    |
|------------------------------|---------|------------------------------------|
| MODEL                        | CLASS   | RATING                             |
| V032                         | 150 LB. | 180 PSI@400° F.<br>10 BARS - 203°C |
| V332                         | 300 LB. | 400 PSI@400° F.<br>21 BARS - 204°C |



### SERVICE RECOMMENDATIONS

Chem-Plug® V-ring top seal sleeved 3-way valves have been designed for those applications where the seal around the valve stem must be adjustable. With a choice of four different plug designs and 90° and 180° rotation, these valves can be specified in eleven different flow patterns.

Multiport Chem-Plug® valves can offer absolute safety in systems where simultaneous opening or closing of multiple valves might create hazardous or expensive contamination of fluids.

### FEATURES

Chem-Plug® models V032 and V332 valves are designed for 150 lb. ANSI and 300 lb. ANSI specifications respectively for temperatures ranging from -20°F to 400°F. The multidirectional flow allows more latitude in design and installation of piping systems. The V032 and V332 valves have a true stuffing box for top seal packing and gland adjustments to reduce leakage by the stem to zero when properly adjusted and maintained. Chem-Plug® sleeved valves with V-ring top seals are readjusted at the factory to hold one and a half times the rated pressure of the valve.

Packing can be adjusted to compensate for normal wear. Like all Chem-Plug® valves, the plug can be adjusted separately from the top seal so that the packing does not have to be readjusted.

The packing can be serviced or replaced without removing the valve from the line.

The solid sleeve is compression molded in virgin PTFE and then sintered. Ryton is also available. This method provides optimum density which minimizes chemical permeation.

Raised sealing rings are cast 360° around the ports for positive in-line sealing. Blow-out lips are cast adjacent to the ports to prevent sleeve rotation and reduce sleeve cold flow.

The plug is grounded through the thrust washer and plug adjuster.

All flanged Chem-Plug® valves meet the face-to-face specifications of API 6D (short pattern), API gate valve standard, ANSI B16.10, and ANSI B16.34.

### OPERATORS

Wrench operators are standard on all sizes through 3": manual gear operators are recommended for 4" and 6" sizes. Cast mounting pads are provided on the flanges for rigid mounting of pneumatic, hydraulic, and electric actuators. The pads can be drilled and tapped when specified.

### TESTING

Each Chem-Plug® valve is tested for seat leakage according to API Standard 598.

### DIMENSIONS and WEIGHTS

| SIZE<br>in.<br>mm | 150 lb<br>300 lb | Flange Holes<br>No. Size B.C.       | A      | B      | C       | G       | H       | P    | P <sub>T</sub> | Weight             |
|-------------------|------------------|-------------------------------------|--------|--------|---------|---------|---------|------|----------------|--------------------|
| 1/2<br>50         | V032             | in. 4 .625 2.375<br>mm 16 60 108    | 4-1/4  | 3-1/2  | 2-3/4   | 4-9/16  | 1-15/16 | 8    | 8-1/2          | lb 10<br>kg 4.54   |
|                   | V332             | in. 4 .625 2.625<br>mm 16 67 114    | 4-1/2  | 3-3/4  | 3       | 4-9/16  | 2-1/16  | 8    | 8-1/2          | lb 13<br>kg 5.9    |
| 3/4<br>20         | V032             | in. 4 .625 2.750<br>mm 16 70 117    | 4-5/8  | 3-7/8  | 2-7/8   | 4-9/16  | 2-1/8   | 8    | 8-1/2          | lb 11<br>kg 5      |
|                   | V332             | in. 4 .750 3.250<br>mm 19 83 152    | 6      | 4-5/8  | 3-1/8   | 4-9/16  | 2-3/8   | 8    | 8-1/2          | lb 15<br>kg 6.8    |
| 1<br>25           | V032             | in. 4 .625 3.125<br>mm 16 79 127    | 5      | 5-1/4  | 3-1/2   | 4-11/16 | 2-1/4   | 8    | 8-1/2          | lb 12.5<br>kg 5.7  |
|                   | V332             | in. 4 .750 3.500<br>mm 19 89 165    | 6-1/2  | 4-7/8  | 3-3/4   | 4-11/16 | 2-9/16  | 8    | 8-1/2          | lb 17<br>kg 7.7    |
| 1-1/2<br>40       | V032             | in. 4 .625 3.875<br>mm 16 98 165    | 6-1/2  | 5      | 4-1/8   | 6-5/16  | 2-3/4   | 14   | 14-7/8         | lb 22.5<br>kg 10.2 |
|                   | V332             | in. 4 .875 4.500<br>mm 22 114 191   | 7-1/2  | 6-1/8  | 4-1/16  | 6-5/16  | 3-1/4   | 14   | 14-7/8         | lb 32<br>kg 14.5   |
| 2<br>50           | V032             | in. 4 .750 4.750<br>mm 19 121 178   | 7      | 6      | 4-1/2   | 6-5/8   | 3-1/8   | 14   | 14-7/8         | lb 30<br>kg 13.6   |
|                   | V332             | in. 8 .750 5.000<br>mm 19 127 216   | 8-1/2  | 6-1/2  | 4-13/16 | 6-5/8   | 3-3/8   | 14   | 14-7/8         | lb 39<br>kg 17.7   |
| 3<br>80           | V032             | in. 4 .750 6.000<br>mm 19 152 203   | 8      | 7-1/2  | 5-1/8   | 7-1/4   | 3-3/4   | 23   | 23-7/8         | lb 47<br>kg 21.3   |
|                   | V332             | in. 8 .875 6.625<br>mm 22 168 283   | 11-1/8 | 8-1/4  | 5-9/16  | 7-1/4   | 4-1/8   | 23   | 23-7/8         | lb 65<br>kg 29.5   |
| 4<br>100          | V032             | in. 8 .750 7.500<br>mm 19 190 229   | 9      | 9      | 6       | 6-9/16* | 4-1/2   | 24** | 25**           | lb 71+<br>kg 32.2+ |
|                   | V332             | in. 8 .875 7.875<br>mm 22 200 305   | 12     | 10     | 7-1/8   | 6-5/16* | 5       | 24** | 25**           | lb 108+<br>kg 49+  |
| 6<br>150          | V032             | in. 8 .875 9.500<br>mm 22 241 266   | 10-1/2 | 11     | 7-1/2   | 7-5/16* | 5-1/2   | **   | **             | lb 128+<br>kg 58+  |
|                   | V332             | in. 12 .875 10.625<br>mm 22 270 403 | 15-7/8 | 12-1/2 | 8-1/2   | 7-5/16* | 6-1/4   | **   | **             | lb 200+<br>kg 91+  |

\* G measured to the top of the plug shaft.

\*\* Gear operator recommended for 4" size and larger.

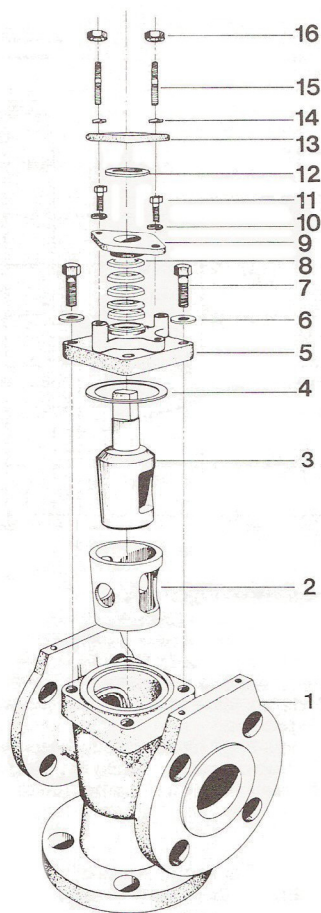
+ Valve only. Add 38 lb. for gear operator.



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## BILL OF MATERIALS



| PART NO. | PART           | CARBON STEEL    | OTHER ALLOYS    |
|----------|----------------|-----------------|-----------------|
| 1        | BODY           | WCB             | AS SPECIFIED    |
| 2        | SLEEVE         | PTFE            | PTFE            |
| 3        | PLUG           | D.I./ ENP       | AS SPECIFIED    |
| 4        | COVER GASKET   | PTFE            | PTFE            |
| 5        | COVER          | D.I.A. 395      | AS SPECIFIED    |
| 6        | LOCK WASHER    | STEEL           | STAINLESS STEEL |
| 7        | COVER BOLT     | B7 STEEL        | STAINLESS STEEL |
| 8        | V-RING PACKING | PTFE            | PTFE            |
| 9        | PACKING GLAND  | D.I.A. 395      | STAINLESS STEEL |
| 10       | LOCK WASHER    | STEEL           | STAINLESS STEEL |
| 11       | GLAND SCREW    | STEEL           | STAINLESS STEEL |
| 12       | THRUST DISC    | STAINLESS STEEL | CARBON STEEL    |
| 13       | PLUG ADJUSTER  | D.I.A. 395      | AS SPECIFIED    |
| 14       | LOCK WASHER    | STEEL           | STAINLESS STEEL |
| 15       | ADJUSTER STUD  | STEEL           | AS SPECIFIED    |
| 16       | HEX NUT        | STEEL           | STAINLESS STEEL |

### MODEL NUMBER CODES

### MATERIAL CODES

### SPECIAL FEATURES

| ANSI Class              | PORTS     | DESIGN and END CONNECTION                                    | BODY MATERIAL   | PLUG MATERIAL  | SLEEVE MATERIAL   | OPERATORS  | SPECIAL FEATURES  |
|-------------------------|-----------|--|---|--|---|--|---|
| VO=150 lb<br>V3= 300 lb | 3 = 3-way | 2 = Sleeved flanged end<br>3 = Sleeved flanged end, jacketed | J = Steel, WCB<br>K = SS, CF8<br>L = SS, CF8M<br>M = CD4MCU<br>Q = Hastelloy B<br>R = Hastelloy C<br>X = Nickel<br>Y = Inconel<br>S = Special | K = SS, CF8<br>L = SS, CF8M<br>M = CD4MCU<br>N = Alloy 20<br>P = Monel<br>Q = Hastelloy B<br>R = Hastelloy C<br>X = Nickel<br>Y = Inconel<br>S = Special | F = PTFE<br>R = Ryton*<br>U = UHMWPE<br>T = Glass filled TFE<br>S = Special | 0 = None<br>1 = Wrench<br>2 = Gear, Manual<br>3 = Electric<br>4 = Pneumatic<br>5 = Hydraulic<br>6 = Special<br>7 = Wrench with locking device<br>8 = Gear with locking device<br>9 = Gear with chain wheel | O = None<br>DT = Drilled, Tapped for actuators<br>CH = Chlorine prepared<br>OX = Oxygen prepared<br>FS = Grafoil top seal Fire safe ( V series)<br>EP = Epoxy coated<br>X = Other (specify)** |

A "V" in front of the model number Means a valve with V-ring top seal.

\* Give a complete, accurate description of the special feature when ordering.  
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#### Example of Ordering Code:

#### V032-JLF1-0

This is an example of a V-ring top seal, 150lb. ANSI, 3 Way, flanged end, sleeved plug valve with a carbon steel body, stainless steel plug, PTFE sleeve, wrench operator, and no special features